

## **Influence Of Nursing Intervention Based On IMB Model On Negative Emotions And Exclusive Breastfeeding Rate After Cesarean Section**

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**Keywords:** Nursing Intervention Of IMB Model; Cesarean Section; Negative Emotions; Exclusive Breastfeeding Rate

**Abstract:** Objective: To analyze the influence of nursing intervention based on IMB model on negative emotions and exclusive breastfeeding rate after cesarean section. Methods: From September 2019 to February 2020, 800 women with cesarean section in Tang County People's Hospital were selected and randomly divided into two groups. The puerpera in control group were treated with conventional nursing mode, while the puerpera in observation group were treated with IMB model nursing mode. The changes of anxiety and depression mood before and after nursing were compared between the two groups, and the differences of exclusive breastfeeding rate during hospitalization and exclusive breastfeeding rate after delivery for six months were made for statistics. Results: there was no statistically significant difference in the scores of anxiety and depression before nursing between the two groups ( $P > 0.05$ ). The scores of puerpera in anxiety and depression after nursing in the observation group were significantly lower than those in the control group ( $P < 0.05$ ). The rate of exclusive breastfeeding and exclusive breastfeeding rate after delivery for six months during hospitalization in the observation group was significantly higher than that in the control group ( $P < 0.05$ ). Conclusion: The application of nursing model based on IMB model in puerpera with cesarean section can be conducted to relieve the negative emotions after obstetrics, and to improve the exclusive breastfeeding rate of puerpera.

Cesarean section is an important surgical method for clinical prevention and treatment of dystocia. With the increase of various pregnancy complications, such as macrosomia, preeclampsia and pregnancy-induced hypertension syndrome, more and more high-risk puerpera are required to deliver child by adopting cesarean section [1]. However, due to the impact of pain after cesarean section on physical and mental comfort of puerpera, and breastfeeding fails to be made by puerpera as early as possible, leading to a decline in the rate of exclusive breastfeeding for newborns [2]. As the best food for newborn babies, breast milk is rich in a variety of nutritional elements and micro elements, and the bacteria in milk can help the growth of intestinal dominant bacterial community of newborn babies to improve the immune ability of newborn babies [3]. Therefore, effective intervention measures should be taken to further improve the exclusive breastfeeding rate after cesarean section. The IMB nursing model is the intervening measure based on the information, motivation and behavioral skills of patients, which is helpful to correct the wrong cognition of patients and thus forming the correct behavioral habits [4]. Therefore, this paper mainly analyzes the application effect of nursing model based on IMB, which is described as follows.

### **1. Data and methods**

#### **1.1 Clinical data**

From September 2019 to February 2020, 800 puerpera with cesarean section in Tang County People's Hospital were selected and randomly divided into two groups. In the observation group, the age of primiparas ranged between 20~34 years old, with an average of  $(26.8 \pm 2.2)$  years old. Gestational weeks ranged from 37 to 41 weeks with an average of  $(38.2 \pm 1.0)$  weeks. In the control group, the age of primipara was 21~35 years old with an average age of  $(27.0 \pm 2.4)$  years old. The gestational weeks were 37~40 weeks with an average of  $(38.6 \pm 1.1)$  weeks. Inclusion criteria: All the pregnant women were primiparas or singleton pregnancies. In this study, all the puerpera and

their family members were informed and signed follow-up investigation. Exclusion criteria: Puerpera with mental illness, serious pregnancy complications and serious cardiopulmonary diseases and puerpera who were taking medication that was regarded as contraindications to breastfeeding. Newborns who have been transferred to the NICU for various reasons. There were no statistically significant differences in age, gestational age, surgical method and anesthesia between the two groups of primiparas.

## 1.2 Methods

In the control group, the puerpera were treated with conventional nursing, and the ward hygiene was improved, at the same time, drugs for anti-infection therapy were offered for puerpera. Besides, they should be given lectures on the advantages and methods of exclusive breastfeeding, and they were encouraged to adopt breastfeeding as early as possible. Meanwhile, the family members should be provided with appropriate education and regular examinations were needed to prevent the occurrence of postpartum complications.

Puerpera in the observation group were treated with IMB based nursing, specific measures are as follows: ① To build a IMB care team: the IMB care team is composed of 1 chief superintendent nurse, 1 co-chief superintendent nurse, 1 doctor in-charge, 1 managing nurse and 2 nurses to assess the physical and psychological status of puerpera in the observation group and formulate nursing plans by integrating IMB model theory. ② Information intervention: To provide one-to-one health education for puerpera mainly on breastfeeding skills and the importance of education. (2) Motivational intervention: Postoperative pain can lead to psychological stress, which had a certain impact on lactation, so it is necessary to closely observe the psychological condition of puerpera and strengthen psychological counseling. Besides, family members were encouraged to accompany the puerpera and they were encouraged to adopt breastfeeding as early as possible. ③ Behavioral intervention: Three-early should be implemented as early as possible, the contact duration between the mother and infant is 30~90min, and the situation of lactation of the puerpera should be assessed to ensure that the infants can suck the milk after delivery within 1 hour, sucking time is 20~30min. Breast massage was needed to accelerate lactation. Pictures, videos and demonstrations and other ways were adopted to correct posture for breastfeeding and milking techniques, and puerpera were instructed to rationally use anti-galactorrhea pad to avoid damage to nipple skin. Women with insufficient breast milk can use a small milk cup to add the amount of milk. One week after discharge, the puerpera were followed up by phone or WeChat to learn about the situation of breastfeeding, the number of daily lactation, the performance of the newborn babies after breastfeeding, the sleep status of the newborns, the color of urine and the number for urination, the number for excrement and nature of defecation, ponderal growth and whether other food was added.

## 1.3 Observation Index

To compare the change of anxious and depressed emotion after and before maternal care of two groups of puerpera and statistics on the difference of exclusive breastfeeding rate and exclusive breast feeding rate after delivery for six months of two group of puerpera during hospitalization is conducted.

## 1.4 Statistical Analysis

SPSS16.0 statistical software was used for statistical analysis, measurement data were expressed by  $(\bar{x} \pm s)$ , differences between groups and within groups were tested by T-value, counting data were compared by X<sup>2</sup> value, and  $P < 0.05$  was considered statistically significant.

## 2. Results

### 2.1 Comparative difference of anxiety and depression scores before and after maternal care between the two groups of puerpera

There was no statistically significant difference in the scores of anxiety and depression before

maternal care between the two groups of puerpera ( $P > 0.05$ ), and the scores of anxiety and depression after maternal care in the observation group were significantly lower than those in the control group ( $P < 0.05$ ), as shown in Table 1.

**Table 1.** Comparative difference of anxiety and depression scores before and after maternal care between the two groups of puerpera (Piece)

Groups	Anxiety Scores		Depression Scores	
	Before Nursing	After Nursing	Before Nursing	After Nursing
Observation Group	65.8±8.6	53.1±6.5	66.5±9.2	52.1±6.2
Control Group	66.1±8.4	58.4±7.2	65.8±9.3	57.8±7.5
T Value	1.404	5.204	1.524	5.314
P Value	0.131	0.042	0.143	0.043

## 2.2 Differences between the two groups of puerpera in exclusive breastfeeding rate and exclusive breastfeeding rate after delivery for six months during hospitalization

The rate of exclusive breastfeeding and the exclusive breastfeeding rate after delivery for six months during hospitalization in the observation group was significantly higher than that in the control group ( $P < 0.05$ ), as shown in Table 2.

**Table 2.** Differences between the two groups of puerpera in exclusive breastfeeding rate and exclusive breastfeeding rate after delivery for six months during hospitalization (N, %)

Groups	Cases	Exclusive breastfeeding rate during hospitalization	Exclusive breastfeeding rate after delivery for six months
Observation Group	400	283 (70.8)	303 (75.8)
Control Group	400	123 (30.8)	143 (35.8)
X <sup>2</sup> Value		5.463	5.635
P Value		0.044	0.046

## 3. Discussion

In recent years, with the increasing number of elderly parturient women lead by the two-child policy, and the improvement of people's living standards has led to an increasing incidence of pregnancy complications, such as pregnancy-induced hypertension syndrome, gestational diabetes mellitus and macrosomia. This kind of pregnant woman has certain risk of childbirth, so cesarean delivery is needed to terminate the pregnancy[5]. However, the pain after cesarean delivery increases the maternal pain, which affects the postpartum breastfeeding[6]. In order to further increase the rate of postpartum breastfeeding, effective interventions are needed.

IMB nursing model is a personalized nursing measure based on information, motivation and behavior, which can effectively improve patients' health behaviors and thus preventing the occurrence of various adverse reactions[7, 8]. The implementation of IMB nursing model is finished with attention to the impact of various factors on change of maternal behaviors, emphasizing the importance of information, motivation and behavioral interventions to improve self-management ability of pregnant women, and corresponding changes in maternal behavior were made[9, 10]. There was no statistically significant difference in the scores of anxiety and depression before maternal care between the two groups of puerpera ( $P > 0.05$ ), and the scores of anxiety and depression after maternal care in the observation group were significantly lower than those in the control group ( $P < 0.05$ ), thus the IMB nursing model can be used to relieve anxiety and depression of puerpera after cesarean section so as to reduce psychological stress reaction. The rate of exclusive breastfeeding and the exclusive breastfeeding rate after delivery for six months during

hospitalization in the observation group was significantly higher than that in the control group ( $P < 0.05$ ), it can be said that the IMB nursing model can be used to effectively improve the recognition of puerpera in breastfeeding, and they will master relevant knowledge of breastfeeding, and the willingness for breast feeding can be improved to improve the breastfeeding rate.

Above said, the application of IMB model-based nursing model in caesarean delivery can be conducted to relieve the negative emotions after obstetrics and improve the exclusive breastfeeding rate, which is worth promoting.

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